

Congratulations-your new bicycle has been fitted with the powerful low-maintenance hydraulic NUTT disc brakes please read these user instructions carefully before you use your NUTT product . Always observe and follow all instructions in user.

## HYDRAULIC DISC BRAKE

### SECTION 1 : GENERAL WARNING

No.	Des	Qty
1	Brake handlebars assembly	1
2	Bleed screw	1
3	Clamp screw	1
4	Push rod	1

No.	Des	Qty
1	Brake handlebars assembly	1
2	Bleed screw	1
3	Clamp screw	1
4	Push rod	1
5	Reed switch	1

Reed switch Configuration is limited to E-Brake lever

No.	Des	Qty
6	Caliper assembly	1
7	Disc pad pin	1
8	Disc pad	2
9	Disc pad spring	1
10	Bleed screw	1

No.	Des	Qty
6	Caliper assembly	1
7	Small guide post	1
8	Disc pad	2
9	Disc pad spring	1
10	Bleed screw	1

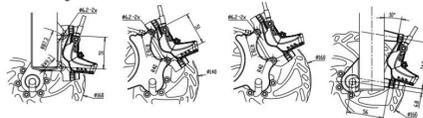
### □ STANDARD FITTINGS

- Y-8 / 9,EY-9 Collocation D-8 caliper is compatible with MANITOU front forks with a distance between mounting of 74.2mm. It can be converted to international standards by using our front and/or rear adaptor brackets.
- Mounting bolts: M6 x 18mm (incl. washer) x 4 pcs.
- Disc rotor: 160 for the front and 140 for the rear; using adaptor brackets, it can be 180 for the front and 160 for the rear or 203 for the front and 180 for the rear.
- Rotor screws: 6 pcs.

### □ RELATED MOUNTING SPECIFICATIONS

#### 1.Specifications of front fork and rear dropout

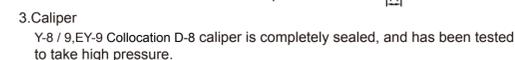
D-8 is compatible to International Standard and MANITOU front forks, see drawings below:



#### 2.Hub

The specifications of the hubs for D-8 disc brake system is the same as international standards, see drawings below:

Hub	A	B
Front hub	10.5 (15.3min)	
Rear hub	15.25 (15.3min)	



#### 3.Caliper

Y-8 / 9,EY-9 Collocation D-8 caliper is completely sealed, and has been tested to take high pressure. DO NOT loosen any screw/bolt on the caliper (the bleed screw can be loosened only when changing brake fluid); otherwise it could cause leaking and consequently no braking. \*Warning: No brake fluid leaking is allowed. Riding should be stopped at once when there is leaking. Repairing should be performed by qualified dealers!

#### 4.Rotor

D-8 rotor specifications are 160 x 1.8mm (thickness) for front, 140 x 1.8mm for rear. They can be 180 x 1.8mm for front, 160 x 1.8mm for rear or 203 x 1.8mm for front, 180x1.8mm for rear when using adaptor brackets. \* Warning : 1. Under normal riding condition, there will be slight wear on the rotor, wear will be greater after more braking. Therefore it is required to check the wear on rotor regularly (Thickness>1.5) . The disc rotor should be changed when it has been deformed or thickness 2. After a long time and/or intensive braking, the temperature of the rotor becomes high. Do not touch the rotor.

### SECTION 2 : INSTALLATION & ADJUSTMENT

#### □ ASSEMBLY

\*Warning: As the brake pads are self-adjusting. DO NOT pull the brake lever before it is fully assembled with the rotor in the caliper slot. The more pulls on brake lever without the rotor in the caliper slot makes the gap between brake pads becomes too narrow. If the brake pad space is too small, insert spacer between brake pads to increase gap and push them back to attain the ideal gap.

- Use the 6 rotor screws (T25 Torquekey,Torque 50-60 kgf-cm) to tighten the disc rotor onto the disc hub.

#### ※ Caution:

- Wear gloves first to avoid contamination to rotor by bare hands.
- The 6 rotor screws must be tightened before riding.
- The 6 rotor screws should be tightened in a diagonal sequence.
- The 6 rotor screws should be replaced after disassembly for 3-4 times as the Nylon will not function correctly.
- Use cleaning naphtha to remove contamination on rotor.
- Do not allow any oil or grease to get onto the rotor. If the rotors become contaminated, please use cleaning naphtha to clean.

- Assemble the wheel on to the front fork or rear dropout and then tighten the screws.

- Assemble the caliper on to the front fork or rear dropout :

- International standard front fork :
  - Tighten the front or rear adaptor bracket onto the front fork or dropout. (Use 2 pcs M6x18 mm bolts, Torque 905 kgf-cm).
  - Mount the caliper to the adaptor bracket with 2pcs M6x18 bolts (Do not tighten the bolts, so that the caliper can move freely on the bracket).
- MANITOU fork :
  - Mount the caliper to the MANITOU fork with 2 pcs M6 x 18 bolts. (Do not tighten the bolts, so that the caliper can move freely on bracket )

- Pull the brake lever to make the brake pads clamp to the disc rotor. (Torque 30-35 kgf-cm).

- Pump brake lever 5-8 times then pump and hold brake lever. And then alternatively gradually tighten the M6 screws. (Torque 905 kgf-cm)

- Spin the wheel to make sure the disc rotor is clear to brake pads. If it is not clear then slack the bolts and redo step V above.

- To adjust reach of brake level's push rod, use 2mm Allen key to adjust reach. (Clockwise for larger angle; Anti-clockwise for smaller angle.)

- Test riding:
  - Braking force on the first 10-30 pulls is not as powerful.(New brake pads need to be bedded in) [\*Warning: Do not ride at high speed when doing test riding, keep safe distance.]

#### □ Maintenance

Hydraulic caliper is designed with self-adjustment brake pad function. No pad adjustment is required before the brake pads are worn out. It is required to stop riding and change new brake pads when the brake lever needs to be pulled with a large travel to stop the bike or there is noise between the brake pads and rotor.

\*Warning: Keep the brake pads free from oil or grease; otherwise braking function may fail.

- First remove the retaining clip at the end of the small guide post..... Photograph.1
  - Use needle-nose pliers and other tools to straighten the tail hook of the cotter pins..... Photograph.2
  - Pull the small guide post with a 3mm hex wrench .....Photograph.3
  - Pull out the cotter pin ..... Photograph.4
  - Remove the pads, and then use a flathead screwdriver to push the piston back into position..... Photograph.5
  - Install new pads, then reinsert pad axle and re-attach the retaining clip.Or insert cotter pin and restore the hook at the end.
  - Turn the wheel and check whether rotor and pads contact each other.If there exists interference, readjust according to the installation instruction and the Step.6.

- Use the 6 rotor screws (T25 Torquekey,Torque 50-60 kgf-cm) to tighten the disc rotor onto the disc hub.

※ Caution:

- Braking force on the first 10-30 pulls is not as powerful (New brake pads need to be bedded in). Do not ride at high speed when doing test riding, keep a safe distance.
- It is normal that there might be braking noise in the wet. The noise will disappear after the brake pads become dry.
- Before riding the bicycle, please check the thickness of the brake pads. When the wear of the brake pads exceeds 0.8 mm the replacement of the pad is recommended. When the total thickness of the worn brake pad is less than 2.7 mm, the pads must be replaced to ensure the safety riding

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Photograph1



Photograph2



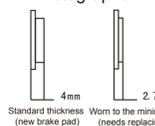
Photograph3



Photograph4



Photograph5



### SECTION 4 : BLEED THE SYSTEM

- When to bleed
  - When the amount of oil in the reservoir tank is noticeably insufficient or the brake pads are worn out, and the brake handle feels loose.
  - It is recommended to change the oil when it becomes noticeably discolored.

- Jieke (NUTT) hydraulic disc brakes use mineral oil. It is recommended to use NUTT or SHIMANO mineral oil for bleeding. Use other mineral oil may reduce braking performance.

- Never add or mix with DOT brake fluid or any mineral oil not for hydraulic brake use.

- If the brake hose is hidden in the frame by using Jieke (NUTT) hose quick release patent, please do not remove the hydraulic release connector to avoid oil loss and low oil level. Otherwise, brake failure may occur. Please contact your place of purchase to replace the brake hose.

- Tools required:
  - Empty cans (for waste oil)
  - Fresh mineral oil (about 30cc)
  - T10/T12 ring spanner
  - Bleed kit
  - Alcohol and clean rag

- Connect the syringes to plastic tubes and connect the adaptors to the other end of plastic tubes.

- Remove the bleed screw on caliper using a T10 ring spanner.

- Lock a syringe to the caliper.
  - D2 ..... Photograph.6
  - D8 ..... Photograph.7

- Caution: If the caliper type is D-2 Before re-installing the upper bleed screw, it is recommended that O-ring attached to the bleed screw should be replaced(dimension 3.5\*1) to avoid the oil leakage

- Remove bleed screw on Brake handlebars.
  - Y2 ..... Photograph.10
  - Y8 ..... Photograph.11
  - Y9 ..... Photograph.12

- Use the syringe connected to caliper to drain the used brake fluid, and place it into the empty can. (Waste oil should be recycled and disposed of in accordance with the regulations of the local authority, and should not be discharged arbitrarily).

- Draw fresh brake fluid into the syringe, make sure that there is no air bubble in the brake fluid then connect the adaptor to caliper.

- Connect the other syringe with adaptor to Brake handlebars.
  - Y2 ..... Photograph.13
  - Y8 ..... Photograph.14
  - Y9 ..... Photograph.15

#### 9. Start bleeding:

- Pump the syringe at caliper side to inject brake fluid into the system until brake fluid flows into the other syringe at the Brake handlebars side and both syringes have roughly equal amount of brake fluid.
- Remove the syringe from BMC, push syringe to get air out and connect syringe back to Brake handlebars.
- Pull brake lever fully back and use hand or a piece of string(cable tie etc.) to keep holding the brake lever. See picture 7

- Y2 ..... Photograph.16
- Y8 ..... Photograph.17
- Y9 ..... Photograph.18

- Pump both syringes alternatively until no air comes out from the system.
- Remove the adaptor on caliper side and resume the bleed screw (Torque 35-40 kgf-cm)
- Release brake lever, pump the syringe at brake master cylinder side a few times until no air comes out.
- Remove the adaptor on Brake handlebars side and resume the bleed screw (Torque 9-10 kgf-cm)
- Pump brake lever 5-8 times to check bite point. If bite point is too low, redo bleeding procedures.
- If bite point is OK, bleeding is completed.

- Photograph.19

The old version of D8 caliper has two identical bleed screws. To ensure bleeding reliability, it is recommended to repeat the bleeding work by using the other bleed port. It is recommended to replace the bleed screws for each bleeding operation of the D8 caliper

- Clean the system by using a cleaning cloth with cleaning naphtha.

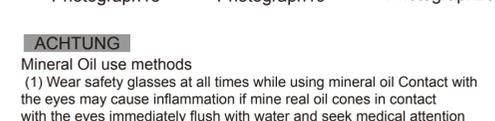
[Warning: After the bleeding, the distance between caliper and piston has to be more than 10.5 mm and the internal pressure has to be released (i.e., free outflow of excess oil from the system) Only then can the screw cover be tightened with a tightening torque of 35-40kgf-cm. Before tightening the bleeding screw. Otherwise, the excess oil will leak from the lid due to compression when the caliper piston moves back]. ..... Photograph.20



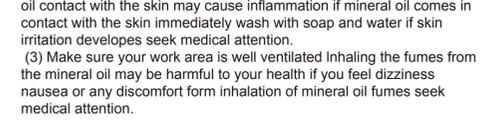
Photograph6



Photograph7



Photograph8



Photograph9



Photograph10



Photograph11

- Do not ingest mineral oil ingestion of mineral oil may cause severe abdominal distress and vomiting and is harmful if ingested immediately contact poison control center and seek medical attention
- Keep mineral oil away from children
- Do not cut or puncture the mineral oil container avoid excessive heat or pressure which may cause the mineral oil to explode or catch fire
- Please deal with it according to the laws of your country
- Please keep it under normal room temperature and in dark place
- Keep it out of direct sunlight

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- Please keep it under normal room temperature and in dark place
- Keep it out of direct sunlight
- Check the bicycle handle

- Soft
- A bit hard
- Hard

If the bicycle handle is loose, please redo bleeding and degassing process.

- Tools required:
  - Empty container (for used fluid)
  - Mineral oil 30cc
  - T10 Torque Wrench
  - Clean naphtha and clean cloth
  - Bleed Kit
  - 8mm open-ended wrench
  - Hose cutter
  - Compression fitting
  - Hose barb
  - Hose must be of correct specification.

- Cutting hose:
  - Re-route the hose to approximately the length required from caliper end and marked with a pen.
  - Slide back the boot hose past the cutting mark.release the compression nut past the marked length
  - Using the 8mm open-ended wrench unscrew the compression nut from the Brake handlebars.
  - Pull the hose out of the Brake handlebars and ensuring the hose remains higher at all times than the caliper.

- Slide the compression nut past the marked length.
- Trim the hose to the position previously marked, slide on the new compression fitting, insert the hose barb pushing fully into the hose up to the shoulder. (Warning: the hose barb has to be completely in the hose to avoid the oil leak and the possible braking failure risk).
- Re-insert the hose into the Brake handlebars pushing firmly, slide the compression nut and screw into the Brake handlebars.
- Tighten the compression nut with an 8mm open-ended wrench to between 70 -90 kgf-cm torque.
- Slide the rubber boot hose over the compression nut.
- Add braking fluid following the steps in the changing brake fluid section.

- Hose replacement: Please contact a qualified dealer for correct replacement accessories.

ACHTUNG  
Mineral Oil use methods

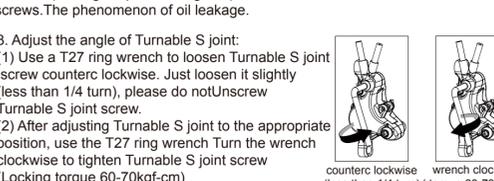
- Wear safety glasses at all times while using mineral oil Contact with the eyes may cause inflammation if mine real oil comes in contact with the eyes immediately flush with water and seek medical attention
- Wear anti-solvent gloves and long sleeves at all times while using mineral oil contact with the skin may cause inflammation if mineral oil comes in contact with the skin immediately wash with soap and water if skin irritation develops seek medical attention.
- Make sure your work area is well ventilated Inhaling the fumes from the mineral oil may be harmful to your health if you feel dizziness nausea or any discomfort form inhalation of mineral oil fumes seek medical attention.

### SECTION 6 : Tighten Turnable S joint Adjustment

※Caution  
1.Under normal circumstances, Turnable S joint is in a locked state and cannot be rotated for adjustment. If you find that Turnable S joint can rotate, immediately lock the piston screw,Check whether the braking is normal.If it is found that the brakes cannot be applied properly,Please stop cycling immediately and consult your dealer or agent.

- For the HD brake installed with oil pipe Turnable S joint , it is recommended that the user Tighten Turnable S joint screw with a tool once a month (locking torque 60-70kgf-cm) to avoid occurrence due to loose union screws.The phenomenon of oil leakage.

- Adjust the angle of Turnable S joint:
  - Use a T27 ring wrench to loosen Turnable S joint screw counterclockwise. Just loosen it slightly (less than 1/4 turn), please do not Unscrew Turnable S joint screw.
  - After adjusting Turnable S joint to the appropriate position, use the T27 ring wrench Turn the wrench clockwise to tighten Turnable S joint screw (Locking torque 60-70kgf-cm)



Brake lever reach adjustment  
1.With regard to improper brake lever reach (too large or too small) or temporarily enhancing braking performance, the reach adjusting screw can be fine-tuned.  
2.Use a 2mm hex wrench to make adjustment: turn the hex key clockwise to widen the distance (97mm in maximum), while turning counterclockwise narrows it (87mm in minimum)  
3.When the lever reach is adjusted to 97mm by turning clockwise, an extra turning will push the aluminum pistons of the brake lever forward, which will cause the function failure of automatic oil replenishment.

SECTION 7 : ADJUST GRIP DISTANCE

SECTION 8 : PRECAUTIONS

- Do not use force to pry the caliper pistons in or out, this may damage the pistons and thereby spill brake fluid over the reservoir top cap.
- Do not pull the brake lever before installing brake pads. Otherwise, the caliper pistons would protrude abnormally or even fall off.
- Correct procedures:
  - When the brake pads are not installed, use a flat head tool to push the caliper pistons back to the reset position. Please be careful not to damage the pistons. If the caliper pistons are difficult to push back, remove the brake lever bleed port screw and then repeat the previous process.
  - Note that brake fluid may spill over the reservoir)
  - Please replace the disc when it is worn, cracked or deformed.
  - If the disc brake pads wear to the thickness of 1.5 mm, be sure to replace with a new disc brake pads.
  - Before attempting to adjust the brakes, please check to make sure that the brake components are fully cooled.
  - Czech original mineral oil or general SHIMANO mineral oil can be used, and if other types of oil are used, this may cause brake operation barriers and render the system unusable.
  - Be sure to use only the oil in the newly opened container, and do not re-use spilled, nozzle-discharged oil here. Used or re-used oil may contain moisture, which may affect the braking and braking performance of the car.
  - To cut the brake tubing to adjust the length of the tubing, or to change the position of the brake tubing, be sure to vent the air in the tubing, please follow the specific steps of the "Product manual" relevant instructions.

- Because the required braking distance will be longer during wet weather, please reduce your speed and apply the brakes early if necessary.
- Do not use the brakes with fluid leaking as doing so may prevent the brakes from operating. Please stop riding immediately and make appropriate repairs.
- If fluid leaks occur, immediately stop using the brakes and consult a dealer or an agency.

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When riding a bicycle for the first time, it is normal to have a light disc brake rub or insufficient braking force. Both issues would be automatically eliminated after a certain distance of riding.

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1.Hydraulic disc brake is not designed to work with the bicycle is turned upside down the brake may not work correctly and a serious accident could occur if the bicycle is turned upside down,be sure to operate the brake lever a few times to check the brake operate normally  
2.Because each bicycle may handle slightly differently depending on the model,be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and get used to operating your bicycle. Improper use of your bicycle's brake system may lead to a loss of control, and result in serious injury due to a fall or collision. With regard to the proper operation, please refer to the bicycle's manual or consult your bicycle dealer.

- If brake does not seem to work normally (operate sluggishly) when the lever is pulled. Set the brake lever parallel to the ground, and then gently depress the brake lever several times and wait for the air bubbles to return to the reservoir tank. Then remove the reservoir tank cover and fill the reservoir tank with mineral oil until no bubbles remain.

SECTION 9 : PRODUCT WARRANTY

Product warranty  
1.During the warranty period, if damage occurs under normal use according to the instruction and operation manual, our company will provide professional after-sale service, but there are exceptions; the warranty last 18 months from the sale of the disc brake (starting from the production date of the caliper laser number) , but the brake pads are not warranted.  
2.If damage is caused by the following listed reasons, it will not be covered by the warranty during the warranty period. However, the company is still happy to serve you by charging parts and service fees.  
The followings are not covered by the warranty:  
· Failure to perform proper maintenance according to the manual  
· Arbitrary disassembly and assembly or not using original parts  
· Damage caused by collision due to external force  
· Abnormal or improper use  
· Damage occurs due to force majeure  
· Selfy-modified or repaired by dealers unauthorized by the company

SECTION 10 : SYSTEM MAINTENANCE

In order to maintain the Jieke hydraulic disc brake system in the best condition for a long period, be sure to do the following checks:  
1.Before riding  
Before riding a bicycle, make sure to check whether the brake system can perform normal braking operations.  
(1)Brake pad installation and replacement:  
Please check the thickness of the brake pads and make sure they reach the lower limit. Remove the brake pads and measure the brake pad thickness. If the thickness of the brake pads is less than 2.7 mm, the pads must be replaced to ensure safe riding.  
(2)Brake hose check:  
Check that there exists no crack, wear or other deformation and damage on the brake hose. Otherwise, the brake hose should be replaced.

- After riding
  - Rotor cleaning:  
If there are muds or debris between the hydraulic disc brake caliper and the brake rotor, please clean them off after riding. Do not allow any oil or grease to get onto the disc brake rotor and brake pads.
  - Tighten screws  
Check whether the screws are loose and maintain the original tightening torque.

### SECTION 11 : POWER-OFF & PARKING

Power-off  
The power-off switch of the brake lever has been calibrated when it is manufactured. If malfunction is found, please contact a bicycle dealer.  
Parking  
Depress the brake lever fully, press the parking button and slowly release the brake lever by locking the parking button, then release it to complete parking. When initiating, depress the brake lever tightly until the parking button automatically pops up, and then release the brake lever.  
Caution: The parking function is only for aided riding. If long-time usage is expected (more than 20 minutes), please use it in conjunction with other methods. Otherwise, the braking force will weaken or even fail, and could result in danger with oil leakage.

SECTION 12 : OTHER EXPLANATORY MATTERS

Brake pads rub on rotor	
Possible causes	The solution
Brake pads or disc brake calipers are not adjusted correctly	Re-adjust the brake pads or brake calipers, refer to Chapters 2 and 3
Brake lever reach is too large	Re-adjust the brake lever reach, refer to Chapter 6
Disc rotors are deformed or bent	To replace the rotor, refer to Chapter 2

Lever action feels loose	
Possible causes	The solution
Air bubbles exist in the system	Remove the bleed screw and depress the brake lever until there is no air remaining
Low level of mineral oil in the system and need refilling	refer to Chapter 4
Loosen the mount adapter	Tighten the screw of the mount adapter, refer to Chapter 2

Depress the brake lever close to the handlebar	
Possible causes	The solution
Low level of mineral oil in the system and need refilling	refer to Chapter 4
Oil leakage of the system	Check the leaking parts and have them repaired or replaced

Insufficient braking force or brake failure	
Possible causes	The solution
Brake pads are contaminated or have oil or grease	Clean the rotor with a dry cloth with isopropyl alcohol, change brake pads
Brake rotor is contaminated or have oil or grease	Clean the rotor with a dry cloth with isopropyl alcohol, change brake pads

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